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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,753	10/30/2003	Yang Hoon Kim	HI-0182	6170

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EXAMINER

MOON, SEOKYUN

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/695,753	Applicant(s) KIM, YANG HOON	
	Examiner Seokyun Moon	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. The Applicants' arguments with respect to **claims 1, 10, 16, and 20** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 23-26** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The aspect of the invention disclosed in the claims, "simultaneously storing" or "simultaneously stores" is not consistent with the aspect of the invention disclosed in the specification. According to the specification of the Application, the storing processes of the brightness control information for the first power mode and the second power mode occur at different timings. In order to store the brightness control information for the first power mode, the device must be operated in the first power mode since the device user set the preferred brightness level for the first power mode when the device is operated in the first power mode. On the other hand, in order to store the brightness control information for the second power mode, the device must be operated in the second power mode since the device user set the preferred brightness level when the device is operated in the second power mode. Since the

Art Unit: 2629

device cannot be operated in different power modes simultaneously, the storing processes for the first power mode and the second power mode cannot be occurred simultaneously.

Furthermore, Examiner respectfully requests the Applicants to provide corresponding lines and paragraphs from the specification, supporting such claim limitation.

Appropriate correction and explanation is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-16 and 18-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art (herein after, "AAPA") in view of Loughran (US 2003/0134632).

As to **claim 1**, AAPA [Appl. fig. 4] teaches a method for adjusting a brightness level of a display used in a portable computer system [Appl. pg 6 par. (21)], the method comprising:

separately storing, in a first memory area ("*Micom-Rom 200*") [Appl. fig. 4], brightness control information for a plurality of brightness levels for each of at least two power mode types ("*AC adaptor power mode*" and "*Battery power mode*");

reading out brightness control information in a first power mode for an adjusted one of the levels and in a second power mode for an adjusted one of the levels from the first memory area [pg 8 par. (31) lines 1-5];

storing, in a second memory area ("*CMOS-RAM 180*"), the brightness control information read out from the first memory area for the first and second power modes [pg 8 par. (31) lines 5-9];

confirming a type of power mode currently being used out of the first and the second power mode types [pg 9 par. (34)]; and

controlling the brightness level of the display based on the brightness control information independently stored in the second memory area for the confirmed power mode [pg 9 par. (34)].

AAPA fails to teach a method of storing the brightness control information for the first power mode and the second power mode respectively in different locations of a second memory area.

However, Loughran teaches a method of storing a different power profile [par. (0062) lines 12-27] which comprises brightness level control [par. (0068)], for each of a plurality of different device states / modes such as a mode used when the computer is operated with battery and a mode used when the computer is operated with AC adaptor [par. (0008)], and of controlling the device operation according to the power profiles depending on a present operational state or mode [par. (0011)]. Furthermore, Loughran inherently teaches that the brightness level controls for the first power mode type and the second power mode type are stored at different locations of ROM ("ROM" included in "*memory 11*") [fig. 1] since it is required for Loughran's device to hold a plurality of brightness level controls in the memory simultaneously and it is not possible to hold the plurality of brightness level controls at the same location simultaneously.

It would have been obvious to one of ordinary skill in the art at the time of the invention to adopt Loughran's idea of storing a different power profile which comprises brightness level control in RAM, for each of a plurality of different device states / modes, in AAPA's device in order to optimize the effectiveness of AAPA's device for a user who operates the device in different contexts / modes [par. (0005)]

As to **claim 2**, AAPA modified by Loughran teaches the method comprising adjusting the brightness level of a LCD using an input device, wherein the type of power mode currently being used includes at least one of an AC adaptor and a supplementary battery mode [Appl. pg 8 par (31) lines 1-5].

As to **claim 3**, AAPA modified by Loughran teaches that the type of power mode currently being used includes at least one of an AC adaptor mode and a supplementary battery mode when power of the portable computer system is switched to a power on mode from a power off mode [Appl. pg 9 par. (33)].

As to **claim 4**, AAPA modified by Loughran teaches that when the power mode type currently being used in the portable computer system is changed to a different power mode type, the changed power mode type includes at least one of an AC adaptor mode and a supplementary battery mode [Appl. pg 9 par. (33)].

As to **claim 5**, AAPA modified by Loughran [fig. 4] teaches that when a power supply being confirmed is a supplementary battery, the brightness level of the display is adjusted by using an index information corresponding to the brightness levels in a battery power mode [Appl. pg 8 par. (31)].

As to **claim 6**, AAPA modified by Loughran teaches that when a power supply being confirmed is an AC adaptor, the brightness level of the display is adjusted by using an index information corresponding to the brightness levels in an AC adaptor power mode [Appl. pg 8 par. (31)].

As to **claim 7**, AAPA modified by Loughran teaches the index information corresponding to the brightness levels in the AC adaptor power mode and the index information corresponding to the brightness levels in the battery power mode are independent and respectively stored in the first memory area [Appl. fig. 4].

As to **claim 8**, AAPA modified by Loughran [Appl. fig. 4] teaches that the index information corresponding to the brightness levels in the AC adaptor power mode and the index information corresponding to the brightness levels in the battery power mode are separately stored in a microcomputer memory of the personal computer system and in a system initialization RAM, the microcomputer memory including the first memory area and the system initialization RAM including the second memory area [Appl. pg 7 par. (28) and pg 8 par. (32)].

As to **claim 9**, AAPA modified by Loughran teaches that when a power supply being confirmed is an AC adaptor, the brightness level of the display is adjusted by using an index information corresponding to the brightness levels in an AC adaptor power mode [Appl. pg. 8 par. (31)].

As to **claim 10**, AAPA [Appl. fig. 4] modified by Loughran teaches a method comprising:
independently storing, in a first storage area ("*Micom-ROM 200*"), brightness level information for a plurality of power supplies ("*AC adaptor*" and "*Battery*") in a computer system;
determining a type of power supply currently being used among the plurality of power supplies in the computer system when a brightness level of a display is adjusted [Appl. pg 8 par. (31) lines 1-5];

selecting brightness level information from the independently stored information in a first storage area, the selected brightness level information corresponding to the determined power supply type for the adjusted brightness level of the display, the determined power supply type corresponding to one of the first or second power supplies [Appl. pg 8 pars. (31) and (32)];

reading index information corresponding to the selected brightness level information [Appl. pg 8 par. (32)];

driving the adjusted brightness level of the display based on the readout index information [Appl. pg 8 par. (32)]; and

updating the second storage area to independently store the index information according to the determined type of power supply [Appl. pg 8 par. (32)].

respectively storing, in different locations of a second storage area, brightness level information read out from the first storage area for a first power supply and brightness level information read out from the first storage area for a second power supply [as discussed with respect to the rejection of claim 1].

As to **claim 11**, AAPA modified by Loughran teaches that at least one of an index information corresponding to an adjusted brightness level in an AC adaptor power mode and an index information corresponding to an adjusted brightness level in a battery power mode is separately stored in the second storage memory [as discussed with respect to the rejection of claims 1 and 10].

As to **claim 12**, AAPA modified by Loughran teaches the method comprising changing from a first power supply being an AC adaptor to a second power supply being a battery, wherein the driving the adjusted brightness level of the display comprises referring to an index information in a battery power mode, and wherein the index information is separately stored in second storage area [Appl. pg 9 par. (35)].

As to **claim 13**, AAPA modified by Loughran teaches the method comprising changing from the battery to the AC adaptor, wherein the driving the adjusted brightness level of the display comprises referring to an index information in an AC adaptor power mode, and wherein the index information is separately stored in the second storage area [Appl. pg 9 par. (34)]

As to **claim 14**, AAPA modified by Loughran teaches the method comprising turning on power of the computer system after the power was turned off, wherein the driving the adjusted brightness level of the display comprises confirming the type of power supply currently being

used, and reading out the second storage memory area index information in an AC adaptor power mode or in a battery power mode [Appl. pg 9 par. (33)].

As to **claim 15**, AAPA modified by Loughran teaches the brightness level of the display being adjusted automatically, periodically or using an input device by a user [Appl. pg 8 par. (31) lines 1-5]

As to **claim 16**, all of the claim limitations have already been discussed with respect to the rejection of claims 1 and 10.

As to **claim 18**, AAPA modified by Loughran teaches the method comprising adjusting the brightness level of a LCD using an input device, wherein the type of power mode currently being used includes at least one of an AC adaptor mode and a supplementary battery mode [Appl. pg 8 par. (31) lines 1-5].

As to **claim 19**, AAPA modified by Loughran teaches the index information stored in the second storage area in the AC adaptor mode corresponds to a brightness level different than a brightness level corresponding to the index information stored in the second storage area in the supplementary battery mode [Appl. fig. 4].

As to **claim 20**, AAPA modified by Loughran [Appl. pg 7 par. (27)] teaches an apparatus that controls an inverter pulse width modulation frequency of a liquid crystal display in a portable computer, comprising:

a first storage area ("*ROM 200*") [Appl. fig. 4] configured to separately provide LCD brightness level information for a plurality of brightness levels for each of at least two power mode types [Appl. pg 7 par. (28)];

a second storage area ("*RAM 180*") configured to respectively store in different locations brightness level information in a first power mode for an adjusted one of the levels and in a

second power mode for an adjusted one of the levels read out from the first storage area [as discussed with respect to the rejection of claim 1];

an inverter ("*inverter 33*") [Appl. fig. 3] configured to supply a voltage to the LCD [Appl. pg 7 par. (27) lines 3-4]; and

a control circuit ("*micom 20*") for controlling a PWM frequency of the inverter to achieve a designated brightness level based on the LCD brightness level information independently stored in the second storage area for a current power supply mode [pg. 7 par. (27) lines 5-8].

As to **claim 21**, AAPA modified by Loughran [Appl. fig. 4] teaches the LCD brightness level information including index information [pg 7 par. (28)].

As to **claim 22**, AAPA modified by Loughran [Appl. fig. 4] teaches the first ("*ROM 200*") and second storage devices ("*RAM 180*") being different memories.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571)272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571)272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

February 1, 2007

S.M.

AMR A. AWAD
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Amr A. Awad", written over a horizontal line that extends to the right.